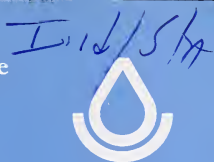


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United States Department of Agriculture
Soil Conservation Service

Program Aid Number 575



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Projects Under
Public Law 566

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Multi-Purpose Watershed Projects Under Public Law 566

Since 1954, when the Watershed Protection and Flood Prevention Act (Public Law 566) was enacted, hundreds of rural and urban communities have used multiple-purpose small watershed projects to promote better land use, reduce water resource problems, and improve the quality of life.

Small watershed projects provide for resource development and help solve resource problems that are too big to be handled by individual landowners but not extensive enough to be supported by large Federal and State projects for water resource development in major river valleys.

Small watershed projects are planned and carried out jointly by local, State, and Federal agencies with the full understanding and support of a large majority of a community's landowners and citizens of the community. A project may be up to 250,000 acres in size.

Small watershed projects:

- Protect the soil resource base;
- Conserve water;
- Protect water quality;
- Reduce sediment damage;
- Prevent floods;
- Manage water used in agriculture;
- Check ground water recharge;
- Control agriculture-related pollution;
- Attract new industries;
- Protect municipal and industrial water supplies;
- Serve as recreational areas; and
- Provide fish and wildlife habitat.

Projects are based on local initiative and responsibility; technical, cost-sharing, and credit assistance; review and approval of local proposals; and opportunities for State financial help and other assistance.

The Soil Conservation Service (SCS) of the U.S. Department of Agriculture (USDA) has primary responsibility for carrying out multiple-purpose watershed projects with assistance from local, State, and other Federal agencies.

This booklet will show you how to start a community watershed project. It discusses the goals of watershed projects; how watersheds are built, financed, operated, and maintained; and the roles and responsibilities of the Federal Government and local citizens in watershed planning.

Getting Started

Any local organization that has authority for such an activity under State law can submit an application for Federal help to develop and carry out a small watershed project. These organizations include:

- Soil and water conservation districts;
- Municipalities;
- Counties;
- Watershed, flood-control, conservancy, drainage, irrigation, or other special-purpose districts; and
- Irrigation and reservoir companies, water users' associations, or similar non-profit organizations.

Indian tribes or tribal organizations, State agencies, and qualified local organizations may sponsor or cosponsor an application. Other organizations may endorse a project application.

The application must include the following information:

- Name, size, and location of the watershed's principal tributaries;
- Descriptions of the land and water problems;
- Details about the work needed, including the anticipated environmental impacts;
- Information about the sponsoring organization and its source of funds; and
- Comments from the State agency that will coordinate Federal assistance.

Application forms can be obtained from the State agency designated to approve applications (see list on pages 17 and 18) for assistance or from SCS. Send completed applications to the designated State agency.

If the application is approved, the State agency sends it to the SCS State conservationist. Further action depends on the availability of planning help from SCS and the priority recommendations of the State agency. If the State agency disapproves the application, there is no further action.

When SCS is able to furnish planning assistance, SCS asks the State agency to examine all of its unserved applications and recommend for help those next in line. Each State agency has criteria that must be met before an application is awarded a high-priority rating. If an application

meets the following conditions, it will satisfy the criteria of most States:

- Sponsoring local organizations have and will use the power of eminent domain or taxation to meet their commitment to carrying out and maintaining the project.
- Help is desired to achieve multiple-purpose development of the water and related land resources of the watershed.
- Substantial progress has been or is being made in applying soil and water conservation measures on individual farms and ranches.
- The proposed project will, through improved use of resources, permit higher standards of living and a greater sharing of resources for a substantial number of people.
- Interest in, understanding of, and support for the project are prevalent throughout the watershed community.

Some States, however, may have special criteria. By working closely with their State agency, local organizations can find out how to obtain a high-priority rating.

After a watershed has been rated high-priority by the designated State agency, SCS conducts a field examination of the watershed. The examination determines the potential for an acceptable watershed plan as well as alternative plans and their probable effects.

After the sponsors hold a public meeting to determine both sponsorship of and public interest in the project, the SCS State conservationist prepares a plan to study the watershed in detail. When the State conservationist thinks that planning assistance can be furnished, a request for help is made to the SCS Chief. Ordinarily, planning help is authorized for a limited number of watersheds each year. Upon authorization, the State conservationist makes personnel available to start preparing a watershed plan.

Planning a Watershed Project

An SCS watershed planning staff of engineers, hydrologists, geologists, economists, and other specialists works with the local SCS representative to make environmental assessments and help the sponsors develop a watershed plan. USDA's Forest Service also assists. USDA's Farmers Home Administration (FmHA) works with the local organization when it wants to obtain a watershed loan. The U.S. Department of the Interior's (USDI) Fish and Wildlife

Service and the State fish and game agency study possible effects of the proposed project on fish and wildlife resources. The USDI's National Park Service may help with recreation development. SCS notifies other Federal and State agencies about the studies and invites them to participate.

As planning progresses, the staff's findings are reviewed with the local organization. A draft plan is prepared that includes the following information:

- Land and water resource protection and development measures proposed;
- Cost of the proposed measures;
- Cost-sharing arrangements;
- Project benefits;
- Methods and schedules for installing and maintaining the measures;
- Alternatives considered and why they were dismissed;
- Environmental impacts of the project;
- Provisions for land acquisition and displacement of any persons, businesses, or farm operations; and
- Remarks from the State agency that coordinates Federal assistance.

Goals of Watershed Projects

Erosion Control

Structural flood-control measures cannot be fully effective unless soil and water conservation measures are applied on individual farms and ranches, rural and public land, and critically eroding areas of the watershed.

For this reason, either the law or USDA policy requires as a condition for providing assistance for structural measures that:

- One-half of the land above floodwater-retarding dams and retention reservoirs be under basic conservation plans;
- At least one-half of the land above floodwater-retarding dams and retention reservoirs be adequately protected from erosion;
- Not less than 75 percent of the needed land-treatment measures be installed, or their installation provided for, on sediment-source areas that are a serious hazard to the design, operation, or maintenance of any structural measure; and

- Installation be assured of on farm practices that are needed to realize benefits from structural measures used for drainage or irrigation.

The basic conservation plans are the same as those that farmers, ranchers, and other landowners develop and carry out with technical help through soil and water conservation districts.

Flood Prevention

Flood prevention measures in watershed projects include land-stabilization measures to prevent the destruction of land, and thereby reduce the movement of damaging amounts of sediment to stream channels and lower land. Large gullies and severely eroding land may be brought under control with vegetation or structures. Waterways crossing two or more farms may be improved by shaping and planting. Waterways may also protect from fire trees and other vegetation needed to keep the soil tied down.

When exceptionally heavy rainstorms sweep across a watershed, runoff may be great even from conservation-treated land. This is especially true if the soil is already saturated or frozen. In addition to flood-stabilization measures, flood prevention also includes nonstructural and structural measures for flood-plain management to reduce the damages caused by surplus water. Structural measures include dams to retard floodwater, channel improvement, levees and dikes, desilting basins, floodways, floodwater diversions, and special water-holding or water-diverting terraces and dikes. Nonstructural measures include zoning or other regulatory actions, land acquisition, relocation, floodproofing, and flood warning systems.

Agricultural Water Management

Agricultural water management measures can be included in watershed projects. Such measures are those for irrigation, drainage, and supply and distribution of water for other agricultural and domestic uses.

Irrigation measures may include:

- Water-supply reservoirs;
- Diversion dams;
- Pumping plants;
- Sluiceways;
- Canal headworks and laterals;
- Main distribution pipelines that carry water to the farm boundary;

- Concrete-lined water ditches (canals);
- Sealed storage reservoirs; and
- Water supplies that are used conservatively.

Drainage measures include all parts of a group drainage system, such as:

- Open ditch or tile;
- Drops;
- Checks;
- Flumes;
- Control gates;
- Manholes; and
- Pumping plants.

Help may be given to provide more uniform supply and distribution of water for agricultural use to two or more landowners. These measures will be designed to make annual streamflow more stable, increase the recharge of groundwater reservoirs, and distribute water community-wide for livestock and other agricultural purposes.

Public Fish and Wildlife Development

Developments that improve fish and wildlife habitat can also be included in watershed projects. These may add storage capacity to reservoirs to regulate streamflow, modify reservoir structures for releasing cold water, improve channels, and provide marshes and pits for breeding and nesting by migratory waterfowl and aquatic mammals.

Municipal or Industrial Water Supply

To improve economic and social conditions in watershed areas, developments for supplying water for municipal or industrial use should be included whenever feasible. Storage capacity in reservoirs may be planned for present or future use. Pipelines conveying water from a reservoir or stream to a filter plant or distribution system may also be included.

Public Recreation Development

Developments that create or improve facilities for outdoor recreation based on the use of or proximity to reservoirs, lakes, natural streams, or shorelines can be included in watershed projects. Such recreational uses include fishing, hunting, swimming, boating, water skiing, picnicking, camping, and related activities.

A watershed recreation development can include:

- A single reservoir, lake, reach of shoreline, or a well-



Irrigation makes a Colorado cornfield flourish.

defined reach of a single perennial stream, but not the entire system of the watershed;

- Land required for public access and public use; and
- Recreation facilities such as roads and trails, parking lots, public water supplies, sanitary facilities, power facilities, beach development, boat docks and ramps, plantings and other shoreline or area improvements, and picnic tables and fireplaces.

To be eligible for cost sharing, recreation developments must be open to the public. Cost sharing will be provided for:

- One development in a project of less than 75,000 acres;
- Two developments in a project of 75,000 to 150,000 acres; and
- Three developments in a project larger than 150,000 acres.

Watershed Plan Approval

SCS reviews the draft watershed plan-environmental impact statement (plan-EIS) for technical adequacy and conformity with legal and policy requirements. The sponsoring local organizations and SCS jointly conduct local reviews, including at least one public meeting, and an interagency review by Federal and State agencies. After resolution of comments, the final plan-EIS is prepared; it is then signed by all the sponsoring local organizations.

If the plan-EIS does not include any single structure exceeding 2,500 acre-feet capacity and does not involve a Federal contribution to construction costs of more than \$5 million, the SCS Chief can, if funds are available,



Enjoying water sports at Montana's newlan Creek Waterdhed.

approve the plan-EIS and authorize the Federal assistance proposed. If, however, the plan-EIS contains provisions that exceed either of these limitations, it must be approved by Congress. SCS submits the plan-EIS to the Secretary of Agriculture, who transmits it to the Office of Management and Budget (OMB). OMB reviews the plan-EIS and sends it to the Congress for consideration by the appropriate committee.

The Committee on Agriculture, Nutrition, and Forestry of the Senate and the Committee on Agriculture of the House of Representatives review plans that involve structures with no more than 4,000 acre-feet of capacity. The Committee on Environment and Public Works of the Senate and the Committee on Public Works and Transportation of the House of Representatives review plans that involve structures with larger capacity. These committees may hold hearings on the plan and may request testimony from representatives of the local organizations.

If Congress approves the plan, the SCS Chief authorizes the Federal assistance specified in the plan when funds are available.

Financing the Project

The SCS Chief allocates funds for watershed projects from money appropriated each year by the Congress. Priority is given to the allocation of funds for technical assistance and engineering services. Funds for construction are allocated

according to the readiness of local organizations to install, operate, and maintain the planned measures.

Cost Sharing

Non-Federal Costs—Local organizations or individual landowners pay the costs for the following:

- Up to 50 percent of the cost of installing land-treatment measures on non-Federal land.
- Acquiring all landrights except landrights for public recreation or fish and wildlife development. These costs include removal, relocation, or replacement of bridges, roads, pipelines, buildings, fences, or wells, whether done by the local organizations or by the owners.
- At least 50 percent of the cost of acquiring landrights for public recreation, or fish and wildlife development.
- Acquiring water rights.
- Administering contracts on non-Federal land unless work is done by Federal contract.
- All construction not allocated to flood prevention, agricultural water management, water-quality management, public recreation, or fish and wildlife development.
- At least 50 percent of construction cost allocated to agricultural water management and public recreation or fish and wildlife development.
- Engineering and other installation services not allocated to flood prevention, agricultural water management, water-quality management, and public recreation or fish and wildlife development.
- At least 50 percent of the engineering and other installation services required for minimum basic facilities for public recreation or for fish and wildlife development.
- Operating and maintaining works of improvement on non-Federal land.
- An equitable share of the cost of operating and maintaining works of improvement on Federal land in consideration of the benefits that accrue to non-Federal land.

Federal Costs—

The Federal Government pays the costs for the following:

- Technical assistance for planning and applying land-treatment measures on non-Federal land.
- A part of the cost, not to exceed the rate provided under other agricultural programs, for land-treatment measures.
- Installation of land-treatment measures on Federal land.
- All construction allocated to flood prevention.
- Engineering and other services—including engineering

services associated with the administration of contracts—allocated to flood prevention, agricultural water management, water-quality management, and fish and wildlife development, and eligible public recreation development.

- Not more than 50 percent of the engineering and other installation services required for minimum basic facilities for fish and wildlife development or eligible public recreation development.
- Not more than 50 percent of landrights required for fish and wildlife development or eligible public recreation development.
- Administering contracts awarded by a Federal agency.

Advances

After a watershed plan-EIS is approved, SCS may “advance” funds to the sponsoring organizations to preserve sites for future construction. Such advances must be repaid with interest before construction. They will be processed by FmHA, obligated and disbursed by SCS, and repaid to FmHA.

SCS may also advance funds to develop a water supply for future municipal or industrial use up to 30 percent of the cost of any multiple-purpose reservoir. Repayment may be deferred for up to 10 years without interest. Local organizations must furnish assurance that the water supply will be used and must agree to a schedule of repayment before construction.

Loans

To help the local organization pay its share of the project cost, FmHA may make loans to the sponsoring local organization. A maximum loan of \$10 million may be made to one project for a period up to 50 years at the Federal long-term borrowing rate.

Carrying Out the Project

There is a job for everyone in carrying out a watershed project—the sponsoring local organizations; citizens of the community; local, State, and Federal agencies; and public and private organizations and groups in the community should all be involved. To carry out the project, everyone must be fully informed about what is being done and what each group’s responsibilities are. This calls for a continuing program of information and education.

Responsibilities of the Local Organizations

The major responsibilities are to:

- Acquire land, easements, and rights-of-way needed for structures or other improvements on private land. The local organization may acquire them by purchase or gift. The local organization is also responsible for removal, relocation, or replacement of bridges, roads, railroads, pipelines, buildings, fences, or wells, whether done by the local organization or by the landowners;
- Let contracts for construction or request that SCS administer contracts. The local organization and SCS enter into an agreement covering each contract for construction (or for landrights for recreation or fish and wildlife development). This agreement is the basis for obligating Federal funds;
- Obtain agreements from landowners and operators to plan and apply soil and water conservation measures and provide assurance of the application of a high percentage of these land-treatment measures; and
- Comply with State laws governing watershed improvements, water rights, or specifications for structures.

The local organization can either employ non-Federal professional engineers satisfactory to SCS or request that SCS engineers provide engineering services for installing structural measures. If the local organization uses non-Federal engineers, it will be reimbursed by SCS for all the costs allocated to flood prevention and agricultural water management and for half of the costs allocated to recreation or fish and wildlife development. The local organization must pay the entire cost allocated to municipal or industrial water-supply development.

Assistance from SCS

SCS gives technical assistance to landowners who plan and apply soil and water conservation measures on their farms and ranches or other rural land. Landowners receive this assistance through soil and water conservation districts. Additional technical assistance and some financial assistance may be given from funds appropriated under Public Law 566 only as they are required to solve problems in the watershed within the agreed-upon period for project installation.

SCS assistance includes:

- Making a soil survey from which the land can be classified according to its capability for use and needs for treatment;
- Helping landowners to plan the use and treatment of their land in accordance with this classification;
- Helping landowners plan and apply soil and water conservation practices such as:
 - Terraces, dams, diversions, waterways, contour farming, and stripcropping. SCS will also help land users and owners grow green-manure cover crops and other vegetation to protect soil from wind and water erosion and to restore, improve, and maintain the soil's productivity.
 - Seeding, sodding, or other vegetative land-stabilization measures on critically eroding areas.
 - Irrigation, chiseling, subsoiling and pitting, contour furrowing, water spreading, drainage, wells, ponds, and other improvements that provide and conserve water for crop, forage, livestock, and fish and wildlife production.
 - Stocking rates, reseeding, erosion control, and other practices necessary to restore and improve range and permanent pastures not in national forests or managed in conjunction with national forests.
 - Woodland-conservation practices that can be applied with general technical help.
- Cost sharing to install the most cost-effective practices to solve identified problems.

Assistance from the Forest Service

The Forest Service provides the specialized technical assistance that landowners need to apply difficult forestry practices. This assistance usually will be made available through the State forestry agency. It includes forest protection, distribution of planting stock, and other specialized technical aid in forest management.

The Forest Service gives necessary technical help with conservation measures needed to restore or improve privately owned rangeland within national forests. The Forest Service also gives this assistance on rangeland adjoining national forests. This assistance is administered in conjunction with the forests under formal agreement with the owners or lessees.



Watershed projects can make wildlife thrive.

Other Available Help

In addition to assistance under Public Law 566, aid is available from other Federal and State programs dealing with land, water, plants, recreation, and fish and wildlife.

SCS uses, and encourages other agencies to use, all help available under other Federal legislation to speed up the completion of the watershed projects. This help includes:

- Educational assistance from the Cooperative Extension System.
- Cost sharing available under agricultural programs.
- Credit from the FmHA.
- Farm-forestry assistance under the Cooperative Forest Management Act.
- Protection of forest areas from fire, insects, and diseases under cooperative programs authorized by the Clarke-McNary Act, Forest Pest Control Act, and White Pine Blister Rust Protection Act.
- Cost sharing under the Great Plains Conservation Program (Public Law 84-1021).
- Assistance in recreation and fish and wildlife development from the Fish and Wildlife Service, the National Park Service, and State recreation and fish and game agencies.
- Technical, cost-sharing, and credit assistance from USDA authorized by the Food and Agriculture Act of 1962 for income-producing recreation developments on rural land, the Cropland Retirement Program, and resource and conservation development projects.
- Protection and treatment of Federal land in the watershed by land-managing agencies.

Maintaining the Project

Sponsoring local organizations are responsible for operating and maintaining all structures and developments on non-Federal land. A written agreement on maintenance is required before Federal funds are made available for any part of the construction cost.

Structures and soil and water conservation measures on Federal land are maintained by the agency administering the land.

Soil and water conservation measures on individual farms and ranches or other rural land are maintained by the owners and operators under agreements with their local soil and water conservation districts. If the watershed is outside a soil and water conservation district, the local organization must make maintenance arrangements satisfactory to SCS for fulfilling this responsibility.

The local organization may charge fees for public recreation provided such fees do not produce revenues in excess of those required to amortize the local organization's initial investment and provide adequate operation and maintenance.

The local organization is required to establish a schedule of maximum admission or use fees that may be charged by private concessionaires.

State Agencies Designated To Approve Applications for Assistance Under Public Law 566

Alabama	State Soil and Water Conservation Committee
Alaska	State Department of Natural Resources
Arizona	State Land Department
Arkansas	State Department of Commerce
California	State Resource Conservation Commission
Colorado	State Soil Conservation Board
Connecticut	State Department of Environmental Protection
Delaware	The Governor
Florida	State Soil and Water Advisory Committee
Georgia	State Soil and Water Conservation Committee
Guam	The Office of the Lieutenant Governor
Hawaii	State Board of Land and Natural Resources
Idaho	State Soil Conservation Commission
Illinois	The Governor
Indiana	State Department of Natural Resources
Iowa	Department of Soil Conservation
Kansas	State Watershed Review Committee
Kentucky	State Department for Natural Resources and Environmental Protection
Louisiana	State Soil and Water Conservation Committee
Maine	State Soil and Water Conservation Committee
Maryland	State Soil Conservation Committee
Massachusetts	State Division of Water Resources
Michigan	State Soil Conservation Committee
Minnesota	State Soil and Water Conservation Commission
Mississippi	State Soil and Water Conservation Commission
Missouri	The Governor
Montana	State Department of Natural Resources
Nebraska	State Natural Resources Commission
Nevada	State Department of Conservation and Natural Resources
New Hampshire	State Soil Conservation Commission
New Jersey	State Bureau of Water Resources Planning

New Mexico	State Engineer
New York	State Department of Environmental Conservation
North Carolina	State Soil and Water Commission
North Dakota	State Soil Conservation Committee
Ohio	State Department of Natural Resources
Oklahoma	State Conservation Commission
Oregon	State Engineer
Pennsylvania	Bureau of Soil and Water Conservation
Puerto Rico	Secretary of Natural Resources
Rhode Island	State Department of Administration
South Carolina	State Water Resources Commission
South Dakota	State Department of Natural Resources Development
Tennessee	State Soil Conservation Committee
Texas	State Soil and Water Conservation Board
Utah	State Soil Conservation Commission
Vermont	State Agency of Environmental Conservation
Virginia	State Soil and Water Conservation Commission
Washington	State Department of Ecology
West Virginia	State Soil Conservation Committee
Wisconsin	State Board of Soil and Water Conservation Districts
Wyoming	State Conservation Commission





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